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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/068,901

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Koichi Watanabe

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FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

LEE, CHEUKFAN

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

11/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/068,901

Applicant(s)

WATANABE, KOICHI

Examiner

Cheukfan Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: Machine translation of Japanese Patent Application Publication No. 11-069164.

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1. Claims 1-3, 10 and 11 are pending. Claims 10 and 11 are newly presented.

Claims 1 and 10 are independent.

2. Applicant's arguments with respect to claims 1-3, regarding the new limitation, have been considered but are moot in view of the new ground(s) of rejection.

Tabata et al. (Japanese Patent Application Publication No. 11-069164), cited by Applicant in the IDS filed Feb. 11, 2002, is applied in the art rejection below. Machine translation of the Japanese reference is attached.

In response to Applicant's request, prior art references Marsh et al. (US 5,170,266) and Obrador et al. (US 6,137,589) are provided below after the art rejection to support the examiner's position on the well known art relied on in the previous and the present Office actions.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yaguchi et al. (US 5,889,596) in view of well known art and Tabata et al. (Japanese Patent Application Publication No. 11-069164), published March 9, 1999.

Regarding amended claim 1 and claim 2, Yaguchi et al. discloses an image reading apparatus in an image processing apparatus (Fig. 1). Yaguchi et al. states that "when the document sheet are sequentially read by using the document feeder, the feeding and the reading of the next document sheet can be controlled prior to the completion of the compression, so that the high efficiency reading and compression are attained" (col. 8, lines 11-15).

Yaguchi et al. discloses an image reading apparatus (image processing apparatus, Figs. 1-4) comprising a feed section (feed unit 1 in Fig. 1) which feeds original one by one (col. 4, lines 25-28), a reading section (4) which reads an image on an original fed from the feed section (1) (col. 4, lines 29-35), a storage section (page memory 40 in Fig. 4) which stores image data read by the reading section (4), a first controls section (1021 in Fig. 2) which executes a control to feed the next original from the feed section (1), when the image data of the original has been stored in the storage section (page memory 40) and in the condition that the predicted value of the predicted compressed data amount is less than or equal to the remaining capacity of a memory unit (44 of 35 of 1023) for storing compressed value, the same image data of the original being supplied to the storage section (40) and prediction unit (45 in Fig. 1), and a second control (1023) which executes a control to read out the image *data* from the storage section (40) and subject the read-out *data* to an encoding process (by compression unit 43 of 35 of 1023, Figs. 2-4), in parallel with the control by the first control section (1021), and to store a result of the encoding

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process in the memory unit (44), not in the storage section (page memory 40) (first embodiment, Figs. 1-7, col. 4, line 20 - col. 8, line 26, note col. 8, lines 11-15). Yaguchi et al. stores the result of the encoding process in a storage section (44) other than the storage section (40) from which image data subjected to encoding is read out. Yaguchi et al. further discloses in a second embodiment in which a memory of a large capacity, i.e., the printer buffer memory (PBM 65), is employed (col. 8, lines 27+, Figs. 8+), the PBM is for storing compressed image data, not image data to be read out to be compressed. The image data to be compressed are stored in page memories (19 and 20).

Although not disclosed by Yaguchi et al., employing a large enough memory, such as a hard drive disk, to store various type of data and/or information is not a novel idea but known in the art. One of ordinary skill in the art would have realized the advantage of employ such a large memory to reduce the number of parts and simplify memory control, as compared to employing more than one memory as in the case of Yaguchi et al. (see memory 44 for storing the result of the encoding process and other memories 40, etc.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a large enough memory, such as a hard drive disk, to accommodate the various types of data of Yaguchi et al., including the image data reading section and to be read out for compressing/encoding, and the result of the encoding process, in order to reduce the number of parts and simplify memory control.

Please see prior art references Marsh et al. and Obrador et al., cited below, to support the examiner's position on the well known art.

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With respect to the new limitation of claim 1, i.e., "the encoding process being a process to convert the read-out data into fixed-length codes in units of 2 x 2 pixels by a fixed-length encoding method", such encoding process for encoding image data from an original scanner is not novel but is taught by Tabata et al. (see fixed-length encoding circuit 1100b and 2x2 pixel block unit, paragraphs 0069, 0073, 0074, and 0085). The encoding method is employed to suppress image quality deterioration (Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a fixed-length encoding circuit in the obvious apparatus discussed above to convert the read-out data into fixed-length codes as taught by Tabata in order to suppress image quality deterioration.

Regarding claim 3, the obvious apparatus discussed above for claim 1 does not include a JPEG encoding process controlled by the second control section (see the encoding methods of Yaguchi et al., such as MH-coding, Q-coder, Lempel Ziv, etc., col. 6, lines 24-29, and col. 12, and col. 11, line 60 – col. 12, line 6).

Tabata et al. further discloses subjecting fixed-length encoded data to a JPEG encoding process to further compress the image data (see paragraph 0172). It would have been obvious to one of ordinary skill in the art at the time the invention was made to subject the coded data resulted in the encoding process discussed for claim 1 to a JPEG encoding process in order to further reduce the amount of coded data as taught by Tabata et al.

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Claims 10 and 11 are rejected as being method claims corresponding to the rejected apparatus claims 1 and 3, respectively.

5. Prior art provided to support the examiner's position on well known art

With respect to the examiner's statement "employing a large enough memory, such as a hard drive disk, to store various type of data and/or information is not a novel idea but known in the art" (see page 4 of the present Office action), Marsh (US 5,170,266) discloses a large memory (33) having a set of locations for storing image data before compression and another set of locations for storing compressed imaged data as a result of compressing the image data (Fig. 2, col. 6, lines 9-18 and 33-59), and Obrador et al. (US 6,137,589) teaches a hard drive disk for storing image data that are not compressed and compressed image data as a result of compressing the image data (col. 1, lines 45-58).

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (571) 272-7407. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cheukfan Lee
October 23, 2007